

31

Notice of Allowability

Application No.

10/785,466

Examiner

Brian J. Livedalen

Applicant(s)

KIRBY, KYLE K.

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/23/2007.
2. ☒ The allowed claim(s) is/are 1-6, 8-11, 13-18, 21, 22, 24-31, 33-36, 38-43, 46-51, 53, 55, and 57-59.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


THANH X. LUU
PRIMARY EXAMINER

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/23/2007 has been entered.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Anderson on 3/8/2007.

The application has been amended as follows:

Claim 1, lines 8 and 9: delete "vertically through the cover unit above the die and/or".

Cancel Claim 12.

Claim 13, lines 1 and 2: replace "wherein the interconnects extend vertically through the cover unit above the die." with --further comprising electrically

Art Unit: 2878

conductive interconnects electrically coupled to corresponding terminals and extending through the cover unit.--.

Claim 15, line 8: delete "vertically through the cover unit above the die and/or".

Cancel Claim 23.

Claim 24, lines 1 and 2: replace "wherein the interconnects extend vertically through the cover unit above the die." with --further comprising electrically conductive interconnects electrically coupled to corresponding terminals and extending through the cover unit.--.

Claim 26, line 12: delete "vertically through the cover unit above the die and/or".

Cancel Claim 37.

Claim 38, lines 1 and 2: replace "wherein the interconnects extend vertically through the cover unit above the die." with --further comprising electrically conductive interconnects electrically coupled to corresponding terminals and extending through the cover unit.--.

Claim 40, lines 9 and 10: delete "vertically through the individual cover units above the dies and/or".

Claim 46, line 10 and 11: delete "and/or vertically through the cover unit above the die".

Claim 57, line 12: delete "vertically through the cover units above the dies and/or".

Allowable Subject Matter

Claims 1-6, 8-11, 13-18, 21, 22, 24-31, 33-36, 39-43, 46-51, 53, 55, and 57-59 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 1-6, 8-11, 13-18, 21, 22, 24-31, 33-36, 39-43, 46-51, 53, 55, and 57-59 are neither anticipated nor made obvious by the prior art of record.

In regard to claims 1, 15, 26, 40, 46, and 57, the prior art fails to disclose a microelectronic die including an image sensor, an integrated circuit electrically coupled to the image sensor, a plurality of terminals electrically coupled to the integrated circuit, a cover unit, and an optics unit having a substrate and an optic member attached to the cover unit, and electrically conductive interconnects extending through the die, the interconnects being electrically coupled to corresponding terminals.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Art Unit: 2878

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bjl



THANH X. LUU
PRIMARY EXAMINER